

I. AMENDMENTS TO THE CLAIMS:

1-76. (Cancelled)

77. (Currently Amended) A ~~combination of a~~ chemical mechanical polishing composition ~~in contact with a~~ for polishing a substrate surface having at least one feature thereon comprising a noble metal, said ~~combination~~ composition comprising:
 ~~a substrate comprising submicron integrated circuits and having a surface having at least one feature thereon comprising a noble metal;~~
 ~~said substrate surface contacting a chemical mechanical polishing composition~~
 comprising:
 a) periodic acid in an amount from about 0.05 to about 0.3 moles/kilogram;
 b) an abrasive; and
 c) a suspension agent selected from a group consisting of ethyl carbonate, aluminum oxide-C, a hydrous sodium lithium magnesium silicate ammonium and polymethacrylate;
 wherein said periodic acid and said abrasive are present in a combined amount sufficient to render the substrate surface substantially planar and to maintain a polishing rate of between 300 Angstroms per minute to about 2000 Angstroms per minute upon chemical-mechanical polishing thereof wherein periodic acid is in an amount from about 0.05 to about 0.3 moles/kilogram.

78. (Currently Amended) The ~~combination-~~ composition of claim 77, wherein the periodic acid is present in an amount from about 0.075 to about 0.3 moles/kilogram.

79. (Currently Amended) The ~~combination-~~ composition of claim 77, wherein the periodic acid is present in an amount from about 0.075 to about 0.175 moles/kilogram.

80. (Currently Amended) The ~~combination-~~ composition of claim 77, wherein the abrasive is present in an amount from about 0.2 to about 6 weight percent.

81. (Currently Amended) The ~~combination~~ composition of claim 77, wherein the abrasive is present in an amount from about 0.2 to about 4 weight percent.

82. (Currently Amended) The ~~combination~~ composition of claim 77, further comprising a pH-adjusting agent, wherein the pH is from about pH 5 to about pH 10.

83. (Currently Amended) The ~~combination~~ composition of claim 77, further comprising a pH-adjusting agent, wherein the pH is from about pH 1 to about pH 4.

84. (Currently Amended) The ~~combination~~ composition of claim 83, wherein the composition consists essentially of water, periodic acid, an abrasive, and a pH-adjusting agent is selected from the group consisting of a quaternary amine, an inorganic base, and any combination thereof.

85. (Currently Amended) The ~~combination~~ composition of claim 83, wherein the pH-adjusting agent ~~comprises an agent~~ is selected from the group consisting of tetramethylammonium hydroxide, ammonium hydroxide, potassium hydroxide, sodium hydroxide, and any combination thereof.

86. (Currently Amended) The ~~combination~~ composition of claim 77, further comprising a suspension agent.

87. (Currently Amended) The ~~combination~~ composition of claim 86, wherein the suspension agent ~~comprises an agent~~ is selected from [[a]] the group consisting of an organic acid, a surfactant, another abrasive, and ethyl carbonate.

88. (Currently Amended) The ~~combination~~ composition of claim 77, wherein the abrasive has ~~comprises an abrasive having~~ a Mohs hardness number of greater than about 6.5.

89. (Currently Amended) The ~~combination~~ composition of claim 77, wherein the abrasive is ~~comprises an abrasive~~ selected from ~~[[a]]~~ the group consisting of alumina, silica, zirconia, spinel, zirconium nitride, and any combination thereof

90. (Currently Amended) The ~~combination~~ composition of any one of claims 77 through 86, wherein the abrasive comprises alumina.

91. (Currently Amended) The ~~combination~~ composition of any one of claims 77 through 86, wherein the feature comprises a material selected from ~~[[a]]~~ the group consisting of Ir, IrO₂, Pt, and any combinations thereof.

92. (Currently Amended) The ~~combination~~ composition of claim 77, wherein said combined amount is sufficient to provide the substrate surface with a wafer-within-wafer-non-uniformity (WWNU) of less than about 12% upon polishing of the substrate surface with the composition.

93. (Currently Amended) The ~~combination~~ composition of claim 77, wherein said combined amount is sufficient to provide the substrate surface with a wafer-to-wafer-non-uniformity (WTWNU) of less than about 5%.

94. (Currently Amended) A ~~combination of a~~ chemical mechanical polishing composition ~~in contact with~~ for polishing a substrate surface having at least one feature thereon comprising a noble metal and a dielectric material, said composition comprising:
~~a substrate having a surface, wherein said surface comprises a dielectric material and has at least one feature thereon comprising a noble metal, and wherein said surface is contacting a composition comprising:~~

- a) periodic acid in an amount from about 0.05 to about 0.3 moles/kilogram; ~~[[and]]~~
- b) an abrasive in an amount from about 0.2 to about 6 weight percent; and
- c) a suspension agent selected from the group consisting of ethyl carbonate, aluminum oxide-C, a hydrous sodium lithium magnesium silicate and polymethacrylate;

wherein said composition has a pH from about pH 5 to about pH 10, and
wherein on polishing the substrate surface with the composition the selectivity of the composition
for polishing the noble metal-containing material over polishing the dielectric material is at least
1:1.

95. (Currently Amended) The ~~combination~~ composition of claim 94, wherein the amount
of periodic acid is from about 0.075 to about 0.3 moles/kilogram.

96. (Currently Amended) The ~~combination~~ composition of claim 94, wherein the amount
of periodic acid is from about 0.075 to about 0.175 moles/kilogram

97. (Currently Amended) The ~~combination~~ composition of claim 94, wherein the amount
of the abrasive is from about 0.2 to about 4 weight percent.

98. (Currently Amended) The ~~combination~~ composition of claim 94, wherein the pH is
from about pH 6 to about pH 10.

99. (Currently Amended) The ~~combination~~ composition of claim 94, further comprising a
pH-adjusting agent.

100. (Currently Amended) The ~~combination~~ composition of claim 99, wherein the pH-
adjusting is selected from [[a]] the group consisting of a quaternary amine, an inorganic base,
and any combination thereof.

101. (Currently Amended) The ~~combination~~ composition of claim 99, wherein the pH-
adjusting agent ~~comprises an agent~~ is selected from the group consisting of
tetramethylammonium hydroxide, ammonium hydroxide, potassium hydroxide, sodium
hydroxide, and any combination thereof.

102-103 (Cancelled)

104. (Currently Amended) The ~~combination~~ composition of claim 94, wherein the abrasive ~~comprises an abrasive having~~ has a Mohs hardness number of greater than about 6.5.

105. (Currently Amended) The ~~combination~~ composition of claim 94, wherein the abrasive is ~~comprises an abrasive~~ selected from ~~[[a]]~~ the group consisting of alumina, silica, zirconia, spinel, zirconium nitride, and any combination thereof.

106. (Currently Amended) The ~~combination~~ composition of any one of claims 94 through 102, wherein the abrasive comprises alumina.

107 (Cancelled)

108. (Currently Amended) The ~~combination~~ composition of claim 94, wherein said composition provides the substrate surface with a wafer-to-wafer-non-uniformity (WTWNU) of less than about 5% upon chemical-mechanical polishing thereof.

109. (Currently Amended) The ~~combination~~ composition of claim 94 wherein the feature comprises Ir.

110. (Currently Amended) The ~~combination~~ composition of claim 94, wherein the feature comprises IrO₂.

111. (Currently Amended) The ~~combination~~ composition of claim 94, wherein the feature comprises platinum.

112-117 (Cancelled)

118. (Currently Amended) ~~The A combination~~ composition for polishing a substrate surface having at least one feature thereon comprising a noble metal, of claim 112, wherein said composition consisting essentially of:

- 1) water;
- 2) periodic acid in an amount from about 0.05 to about 0.3 moles/kilogram;
- 3) an alumina abrasive in an amount from about 0.2 to about 6 weight percent; [[and]]
- 4) optionally a pH-adjusting agent in an amount sufficient to cause the pH of the slurry to be between about pH 1 to about pH 4 or between about pH 5 to about pH 10; and
- 5) a suspension agent; [[and]]

wherein the suspension agent is selected from the group consisting of ethyl carbonate, aluminum oxide-C, a hydrous sodium lithium magnesium silicate ammonium and polymethacrylate.

119-129 (Cancelled)

130. (Currently Amended) ~~The combination~~ composition of claim [[112]] 118, wherein the feature comprises Ir.

131. (Currently Amended) ~~The combination~~ composition of claim [[112]] 118, wherein the feature comprises IrO₂.

132. (Currently Amended) ~~The combination~~ composition of claim [[112]] 118, wherein the feature comprises platinum.

133. (Currently Amended) ~~The combination~~ composition of claim [[112]] 118, wherein the feature comprises gold.

134. (Currently Amended) The ~~combination~~ composition of claim ~~[[112]]~~ 118, wherein the feature comprises silver.

135. (Currently Amended) The ~~combination~~ composition of claim ~~[[112]]~~ 118, wherein the ~~[[first]]~~ abrasive consists essentially of alpha-alumina.

136. (Currently Amended) The ~~combination~~ composition of claim ~~[[112]]~~ 118, wherein the ~~[[first]]~~ abrasive consists essentially of gamma-alumina.

137. (Currently Amended) The ~~combination~~ composition of claim ~~[[112]]~~ 118, wherein the ~~[[first]]~~ abrasive consists essentially of alpha-alumina and gamma-alumina.

138. (Currently Amended) The ~~combination~~ composition of claim ~~[[112]]~~ 118, wherein the substrate further comprises a dielectric material, and wherein the selectivity of the composition for polishing the noble metal-containing material over polishing the dielectric material is at least 1:1.

139. (Cancelled)

140. (New) The composition of claim 118 wherein the composition includes at least one pH-adjusting agent selected from the group consisting of a quaternary amine, an inorganic base, and any combination thereof.